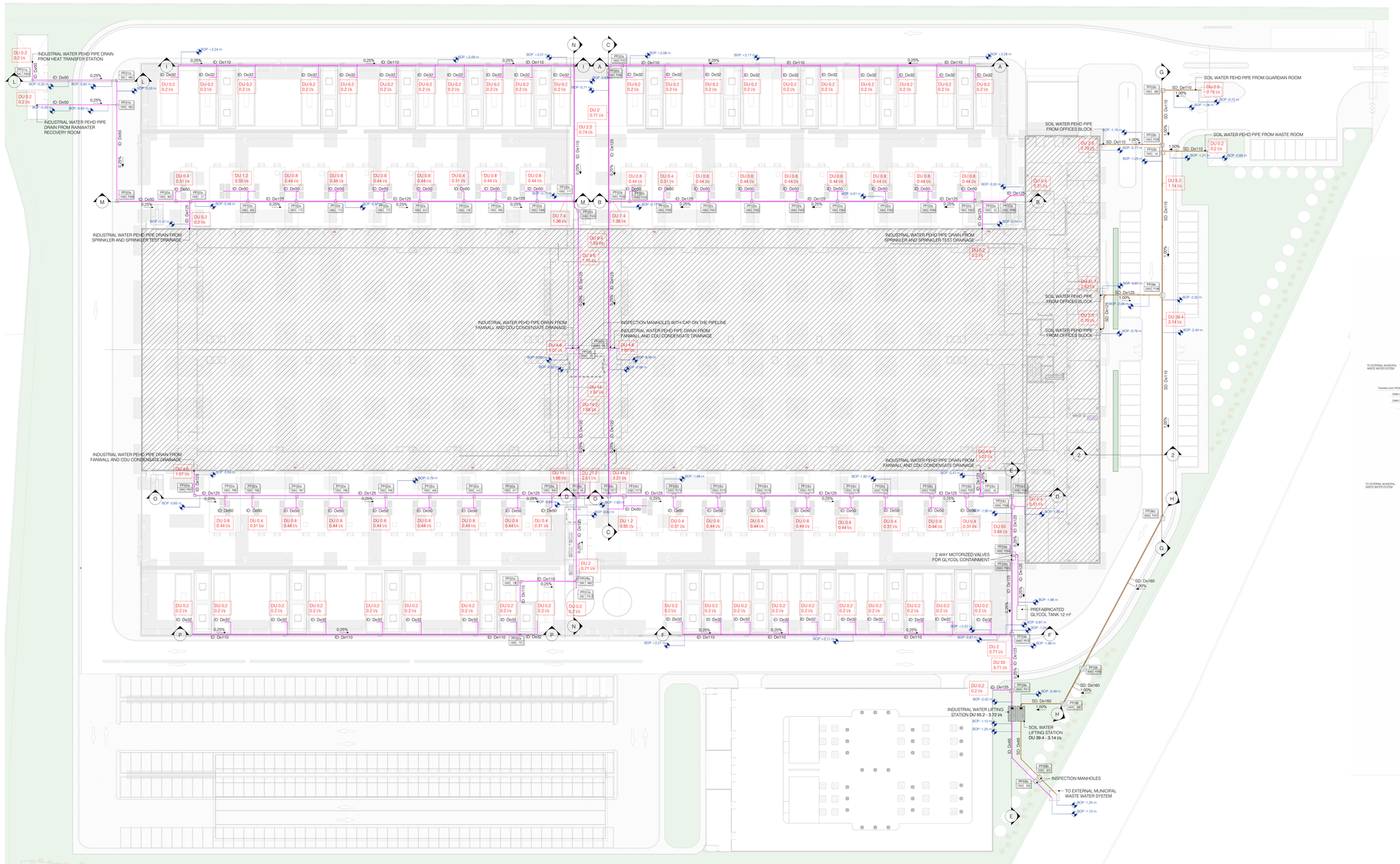

INDUSTRIAL WATER PEHD PIPE DRAIN FROM HEAT TRANSFER STATION
INDUSTRIAL WATER PEHD PIPE DRAIN FROM RAINWATER RECOVERY ROOM
INDUSTRIAL WATER PEHD PIPE DRAIN FROM SPRINKLER AND SPRINKLER TEST DRAINAGE
INDUSTRIAL WATER PEHD PIPE DRAIN FROM FANWALL AND CDU CONDENSATE DRAINAGE
INDUSTRIAL WATER PEHD PIPE DRAIN FROM FANWALL AND CDU CONDENSATE DRAINAGE
INSPECTION MANHOLES WITH CAP ON THE PIPELINE
INDUSTRIAL WATER PEHD PIPE DRAIN FROM FANWALL AND CDU CONDENSATE DRAINAGE
INDUSTRIAL WATER PEHD PIPE DRAIN FROM SPRINKLER AND SPRINKLER TEST DRAINAGE
SOIL WATER PEHD PIPE FROM OFFICES BLOCK
SOIL WATER PEHD PIPE FROM GUARDIAN ROOM
SOIL WATER PEHD PIPE FROM WASTE ROOM
SOIL WATER PEHD PIPE FROM OFFICES BLOCK
SOIL WATER PEHD PIPE FROM OFFICES BLOCK
2 WAY MOTORIZED VALVES FOR GLYCOL CONTAINMENT
PREFABRICATED GLYCOL TANK 12 m³
INDUSTRIAL WATER LIFTING STATION DU 50.2 - 3.72 l/s
SOIL WATER LIFTING STATION DU 39.4 - 3.14 l/s
INSPECTION MANHOLES
TO EXTERNAL MUNICIPAL WASTE WATER SYSTEM

5100_GF_LF_Industrial and Domestic Waste water drainage systems - External Areas - Sheet EM_5100

1 : 500

Manhole - Tag

Object code → AAXX
Height → XXX YYY → progressive number

Object code → DXXX
Height → DXXX

DR - Legenda Tubazioni

DR - Pipe Systems Legend

SD	Scarico Acque Nere *Soil Water*
ID	Scarico Acque Industriali *Industrial Water*
BOP 2.35 m	Quota Fondo Tubo - BOP *Bottom of Pipes' public - BOP*

5100 Schedule Plumbing Fixtures

Type Mark	Length	Width	Diameter
PF01a	500.00	500.00	
PF01b	500.00	500.00	
PF01c	500.00	500.00	
PF02a	700.00	700.00	
PF02b	700.00	700.00	
PF02c	700.00	700.00	
PF03a	1000.00	1000.00	
PF03b	1000.00	1000.00	
PF04a	1500.00	1500.00	
PF04b	1500.00	1500.00	
PF05a	1500.00	1500.00	
PF05b	2000.00	2000.00	
PF06a	1800.00	800.00	
PF07a	1800.00	1000.00	
PF07b			1000.00
PF08b			1000.00
PF08c			1000.00
PF09b			1200.00
PF09c			1200.00
PF09d			1200.00
PF09e			1200.00
PF09f			1200.00
PSW01a	500.00	500.00	
PSW01b	500.00	500.00	
PSW01c	500.00	500.00	

NOTES PLUMBING AND DRAINAGE SYSTEMS

- Supply piping for the water and sanitary utilities within the toilets will be made of multilayer from manifolds
- In case of supply not derived from manifold, place recessed shut-off taps with cap for each water utility
- Provide vents at high points and drains (connected to prepared manholes or conduits) at low points, in locations agreed with the DL
- Provide a water collection network for the drainage of the rainwater from the roofs and the condensate from the air conditioners
- Condensate water collection networks must be separate and distinct from those into which they flow by the interposition of permanently wet or dry inspectable odor trap.
- Graywater collection networks must be separate and distinct from those into which they flow by the interposition of an inspectable siphon.
- Blackwater collection networks must be separate and distinct from those into which they flow by the interposition of an inspectable SiphonBrace air feeding to the public sewer.
- All discharges collected below the level of discharge to the public sewer shall be conveyed to collection and lifting tanks equipped with electric pumps.
- Testing operations should be carried out while keeping the drainage network continuously visible.
- Provide inspection wells at the intersection of the main pipes and at the base of the vertical ducts.
- All discharge pipes, both main and secondary, except where otherwise indicated, shall have the following minimum slopes:
  - service drains to sewer risers: i=2%
  - main drains to sewer risers: i=1%
  - stormwater / condensate manifolds: i=0.5%

TYPICAL DIAGRAM CONNECTION BETWEEN MANIFOLDS HAVING DIFFERENT ELEVATIONS

TYPICAL DIAGRAM DRAINS CONNECTIONS DECENDENT TO MAIN MANIFOLD

TYPICAL DIAGRAM PREVENTIVE LIFTING PUMP CONNECTION WITH DISCHARGE NETWORK

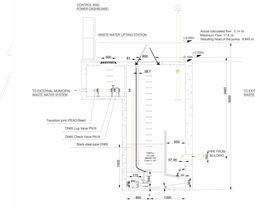
GENERAL NOTES:

- Verify all dimensions for mechanical installations under contract.
- All measurements and locations of materials and equipment are to be verified on-site by the contractor, who shall promptly report any interference with existing.
- Any undetected equipment shall be maintained. If necessary, it shall be modified and restored by the contractor.
- Any proposed modifications to the design shall be submitted to the engineer and shall be approved by the contractor and submitted to the construction manager.
- Final sizing according to the manufacturer of the equipment and materials actually installed.
- All equipment must be easily maintainable and accessible via trapdoors or similar solutions even where not specifically specified.
- The contractor must carefully check the design and report any inaccuracies, incompleteness or discrepancies with any standard or law.
- Construction detail drawings necessary for the proper execution of the work shall be arranged by the contractor.
- The installation of elements in the bed must comply with all manufacturers' prescriptions and recommendations, good engineering rules on acoustics and fire prevention.
- Any modifications to the plumbing and drainage systems indicated on the basis of the available documentation, should be re-evaluated and discussed during the works, after preliminary verification following appropriate surveys of the existing situation.
- The contractor must carefully check the design and report any inaccuracies, incompleteness or discrepancies with any standard or law.
- The contractor is responsible for the preparation of all shop drawings, including those relating to the modifications to the designs and not with hammered deviations or attachments. The Contractor shall be responsible for making construction drawings showing the type of derivations and connections between ducts and ducts with the indoor units provided.

OTHER NOTES:

The submission has been prepared to provide an adequate basis for the Planning Application, understanding that the RIBA4 this project has not yet been finalized. As such, minor adjustments to the external networks may be required, particularly regarding their integration and connection points.

It is the responsibility of the General Contractor, during the RIBA5 design phase, to ensure that the systems are coordinated and compliant with the final RIBA4 project for the "Issued for Construction" phase and the "As Built Drawings", "Telecom Design" and "Security Design" projects. Any necessary adjustments will be conducted in close collaboration with the engineering and project teams defined in the RIBA4 design.


CONTROL AND POWER DASHBOARD
WASTE WATER LIFTING STATION
Actual calculated flow: 3.14 l/s
Maximum Flow: 7.5 l/s
Resulting head of the pump: 8.840 m
TO EXTERNAL MUNICIPAL WASTE WATER SYSTEM
Transition joint PEAD/Steel
DN80 Ltg Valve PN16
DN80 Check Valve PN16
Back steel pipe DN80
INDUSTRIAL WATER LIFTING STATION
Actual calculated flow: 3.72 l/s
Maximum Flow: 7.5 l/s
Resulting head of the pump: 8.840 m

The Level Key Plan shows the levels used for the design. The system dimensions refer to the floor level. All pipe base heights refer to absolute height as distance from level

NOTE GENERALI

1. Il presente disegno non potrà in alcun modo per il progetto di Cliscatina
2. Per la corretta interpretazione del disegno è necessario la lettura congiunta di tutti gli elaborati di progetto e grafici
3. Le quote riportate sul presente disegno sono da intendersi in millimetri salvo dove non diversamente indicato. Le quote sono da intendersi a meno di eventuali tolleranze da prevedersi in fase di progettazione esecutiva.
4. Il progetto architettonico è stato sviluppato in collaborazione dell'impianto di progetto e non è da considerarsi esaustivo per la realizzazione dell'opera. Il progettista dovrà verificare la corretta esecuzione dell'opera in base alle normative vigenti.
5. Il progetto prevede la realizzazione di un impianto di trattamento delle acque reflue domestiche e industriali, con una capacità di trattamento di 10 l/s. L'impianto è composto da una vasca di accumulo, una vasca di trattamento biologico e una vasca di chiarificazione finale. Il progetto prevede la realizzazione di un impianto di trattamento delle acque reflue domestiche e industriali, con una capacità di trattamento di 10 l/s. L'impianto è composto da una vasca di accumulo, una vasca di trattamento biologico e una vasca di chiarificazione finale.
6. Il progetto prevede la realizzazione di un impianto di trattamento delle acque reflue domestiche e industriali, con una capacità di trattamento di 10 l/s. L'impianto è composto da una vasca di accumulo, una vasca di trattamento biologico e una vasca di chiarificazione finale.
7. Il progetto prevede la realizzazione di un impianto di trattamento delle acque reflue domestiche e industriali, con una capacità di trattamento di 10 l/s. L'impianto è composto da una vasca di accumulo, una vasca di trattamento biologico e una vasca di chiarificazione finale.
8. Tutte le misure e le coloriture saranno da concordare e definire con la DL.
9. Le pendenze necessarie ed elencate sulle planimetrie risultano complessivi e concrete, ove sono state indicate eventuali allineamenti di quote puntuali e pendenze diverse da quelle indicate, dovranno essere concordate con la DL.
10. Il progetto prevede la realizzazione di un impianto di trattamento delle acque reflue domestiche e industriali, con una capacità di trattamento di 10 l/s. L'impianto è composto da una vasca di accumulo, una vasca di trattamento biologico e una vasca di chiarificazione finale.
11. Il progetto prevede la realizzazione di un impianto di trattamento delle acque reflue domestiche e industriali, con una capacità di trattamento di 10 l/s. L'impianto è composto da una vasca di accumulo, una vasca di trattamento biologico e una vasca di chiarificazione finale.
12. L'edificio è dotato di impianto antincendio a sprinkler a servizio di tutti i locali. Le tubazioni di alimentazione dell'impianto sono in acciaio zincato.
13. Il progetto prevede la realizzazione di un impianto di trattamento delle acque reflue domestiche e industriali, con una capacità di trattamento di 10 l/s. L'impianto è composto da una vasca di accumulo, una vasca di trattamento biologico e una vasca di chiarificazione finale.

REV.	DATA / DATE	DESCRIZIONE / DESCRIPTION
	11/10/2024	RIBA4 - Underground Services

PROGETTISTA / DESIGNER:

L22 s.r.l.s. a socio unico di Lombardini22 S.p.A.
Via Lombardini 22 20143 Milano, Italia
T. 02 89 69 42 00 T. 02 83 59 13 87
mail@l22.it www.l22.it

Black & White Engineering
88 Wilson Street London, EC2A 2BB United Kingdom
www.bw-engineering.com

STRUTTURE / STRUCTURE:

SPS s.r.l.
Via M. Gioia, 64 - 20125 Milano, Italia
segreteria@sps-srl.it.it T. 0236564600

COMMITTENTE / CLIENT:

STACK INFRASTRUTTURE
INFRASTRUCTURE ITALIA LAND 6 S.r.l.
Via Dei Bocconi Rovicciello, 2 Palazzo Uni 20090 Assago (MI)

PROGETTO / PROJECT:

MIL 05A
Via Galileo Galilei SNC, Vignate (MI)

PROGETTISTA / DESIGNER:

Ing. Roberto Cereda - Iscritto all'Ordine degli Ing. di Brescia n°2909

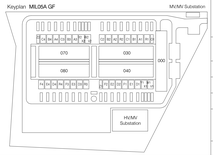
OGGETTO / OBJECT:

RIBA 4 - MIL 05A

TITOLO / DESCRIPTION:

Sitowide External Services
Soil&Industrial Water Drainage System
Servizi Esterni
Scarichi Acque Nere e Industriali

Keyplan: **MIL05A GF**



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COMMESSA / JOB: 4025	FORMATO / SHEET: A0++

TAVOLA / DRAWING:

EM_5100

DATA REV.: 11/10/2024 | REV.: